

SEP 21 1936

# FOREIGN POLICY REPORTS

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September 15, 1936

## Raw Materials in World Politics

BY JOHN C. deWILDE

PUBLISHED TWICE A MONTH BY THE

Foreign Policy Association, Incorporated

EIGHT WEST FORTIETH STREET, NEW YORK, N. Y.

VOLUME XII NUMBER 13    25¢ a copy    \$5.00 a year

# Raw Materials in World Politics

BY JOHN C. deWILDE

*with the aid of the Research Staff of the Foreign Policy Association  
and in cooperation with the Geneva Research Center*

EVER since the industrial revolution the problem of obtaining the raw materials essential to modern economic life has claimed a large share of the attention of economists, business men and statesmen. Before the World War the problem of raw materials was less acute than it is today. There was considerable rivalry among countries in the development of foreign markets and foreign sources of raw materials. Particularly as the system of capitalist production spread from England to the European continent, and still later to the New World, international economic competition became more intense, causing in part the race for colonial possessions in the closing decades of the 19th century. On the whole, however, the development of a truly world embracing economy through the exchange of goods and the migration of labor and capital enabled nations to secure the necessary supplies for their industries without serious obstacles. Led by England, the world entered a period of free international trade. Even though the last quarter of the century witnessed a growth in tariff protection, the exchange of goods was never so impeded by all sorts of restrictions and discriminations as after the war. Countries poor in raw materials were able to obtain them by exporting the products of their soil or factories. Those overpopulated in relation to their natural resources could freely export labor to countries more richly endowed but little developed. Capital moved abroad in large quantities, aiding in the economic development of the newer countries and making available their ample reserves of raw materials. There was a rapid and almost continuous expansion of international commerce which brought increasing prosperity to nearly every nation.

Today the situation is markedly different. International trade has declined sharply. Excessive

tariffs, quotas, exchange restrictions and clearing agreements have reduced and distorted the flow of goods. Imperial and colonial tariff preferences have increased. The breakdown of the international machinery of exchange has brought the world back to primitive methods of barter. Populous countries have been deprived of the safety-valve of emigration. Long-term movement of capital to foreign lands has ceased as payments on previous investments were suspended and opportunities for profit disappeared. With economic nationalism triumphant, stress has been laid on the consumption of national goods, the employment of national labor and the use of national merchant marines. As the volume of international trade shrank and many countries experienced increasing difficulties in procuring a supply of foreign exchange adequate to maintain essential imports, the position of nations possessing within their own geographic limits a large and varied supply of raw materials became more and more enviable. Tension between the "haves" and the "have nots" has increased and become one of the primary causes of international unrest. Those who count themselves among the "proletarian nations" have been advancing with ever greater forcefulness their claims to a larger share of the world's wealth. Japan has conquered Manchuria; Italy has annexed Ethiopia; Germany is demanding consideration of its colonial claims. Other countries, not strong enough to enforce consideration of their demands, may on the basis of equity have the same or even a better claim to a fairer distribution of the world's wealth of primary products.

Speaking before the League Assembly on September 11, 1935 the British Secretary for Foreign Affairs, Sir Samuel Hoare, conceded that as the question of raw materials "is causing discontent

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FOREIGN POLICY REPORTS, VOLUME XII, NUMBER 13, SEPTEMBER 15, 1936

Published twice a month by the FOREIGN POLICY ASSOCIATION, Incorporated, 78 West 40th Street, New York, N. Y., U.S.A. RAYMOND LESLIE BUELL, *President*; WILLIAM T. STONE, *Vice President and Washington representative*; VERA MICHELES DEAN, *Editor*; HELEN TERRY, *Assistant Editor*. *Research Associates*: T. A. BISSON, VERA MICHELES DEAN, HELEN H. MOORHEAD, DAVID H. POPPER, ONA K. D. RINGWOOD, CHARLES A. THOMSON, M. S. WERTHEIMER, JOHN C. DEWILDE. Subscription Rates: \$5.00 a year; to F.P.A. members \$3.00; single copies 25 cents. Entered as second-class matter on March 31, 1931 at the post office at New York, N.Y., under the Act of March 3, 1879.

and anxiety, the wise course is to investigate it, to see what the proposals are for dealing with it, to see what is the real scope of the trouble and, if the trouble is substantial, to try and remove it."<sup>1</sup> Such an inquiry is the subject of this study. An investigation of this kind must deal not only with the geographic distribution of raw materials, but with the factors that prevent or restrict utilization of these products by all countries. It must explain why a number of states have been demanding secure access to raw materials just at a time when supplies of almost all primary products have been most plentiful and prices have fallen to exceedingly low levels. Finally, it must devise solutions enabling all countries to obtain adequate amounts of the raw materials they lack and to market on reasonable terms those of which they have a surplus.

#### THE ESSENTIAL RAW MATERIALS

In determining the relative position of countries with respect to raw materials, one must necessarily distinguish between those of fundamental and those of secondary importance. Although it is impossible to determine scientifically the relative importance of all raw materials, three minerals are undoubtedly most essential to modern industry—coal, iron and copper. Coal is of primary importance, not only because it remains the chief source of energy, but because without it cheap mass production of iron and steel would be impossible. Petroleum and hydro-electricity can only supplement coal in the production of power, and play but an insignificant rôle in the smelting of iron and refinement of steel.<sup>2</sup> Good coking coal is the most important raw material asset a country can possess, for it is essential in the reduction of iron ore, and its by-products—ammonium sulphate, benzol and tar—are among the most valuable primary materials of the chemical industry.<sup>3</sup> Next to coal, iron is of the greatest or perhaps equal importance, for if coal makes possible the utilization of iron and steel on a large scale, the energy of coal could not be harnessed and directed into useful channels without iron.<sup>4</sup> Copper owes its position to the fact that it is the most effective carrier of electrical

energy. It is therefore indispensable to the electrical industry.<sup>5</sup>

Among other metals, the production of lead and zinc closely approximates that of copper. Only iron is said to exceed lead in its diversity of usefulness and application.<sup>6</sup> Zinc is not only used for galvanizing, brass making and sheet rolling, but its compounds find various uses in the manufacture of pigments and dyes, in pharmacy and medicine, and in the extraction of gold and silver from their ores.<sup>7</sup> Although not produced in such large quantities, aluminum, tin and nickel deserve high ranking in the hierarchy of raw materials. The lightness of aluminum has made it indispensable to the transportation industry, particularly aviation, and its electrical conductivity has enabled it to compete increasingly with copper.<sup>8</sup> Tin owes its importance almost exclusively to the modern canning industry, while nickel is the most widely used alloy of steel—to which it imparts great resistance to corrosion and high tensile strength.

Of equal rank with the more important metals are such minerals as petroleum, which today furnishes more than one-quarter of the energy used in the United States, and sulphur. The latter is used not only in making sulphuric acid, the most widely used acid of the chemical industry, but in the manufacture of wood pulp and paper, paints and varnishes, agricultural dusts and sprays, and in vulcanizing rubber. Among the leading vegetable raw materials are, of course, rubber, such fibers as cotton, wool and silk, and vegetable oils. Although the value of the latter is somewhat diminished by the availability of animal fats as substitutes, vegetable oils have in all over thirty uses. They find employment, for instance, in the manufacture of soap, paint and varnish, margarine, medicinal and pharmaceutical products, perfumery and cosmetics.<sup>9</sup> Timber, particularly pulpwood, should also be counted among the more valuable raw materials.

The remaining raw materials are distinctly secondary in importance. Mention should, however, be made of the ferro-alloys including manganese, chromium, tungsten, molybdenum and antimony. Although produced for the most part in small quantities they lend indispensable qualities to steel, such as hardness, strength, toughness, and resis-

1. League of Nations, *Records of the Sixteenth Ordinary Session of the Assembly, Plenary Meetings*, p. 45.

2. W. H. Voskuil, *Minerals in Modern Industry* (New York, John Wiley & Sons, 1930), p. 20. In 1934 coal still supplied about 54 per cent of the energy used in the United States. Cf. *Statistical Abstract of the United States, 1935* (Washington, Government Printing Office, 1935), p. 339.

3. H. B. and L. W. Killough, *Raw Materials of Industrialism* (New York, Thos. Y. Crowell, 1929), p. 257; also Erich W. Zimmermann, *World Resources and Industries* (New York, Harper, 1933), p. 482.

4. Voskuil, *Minerals in Modern Industry*, cited, pp. 21-22.

5. *Ibid.*, pp. 22-23; also Zimmermann, *World Resources and Industries*, cited, pp. 666-67.

6. Voskuil, *Minerals in Modern Industry*, cited, pp. 244-45.

7. *Ibid.*, pp. 248-49.

8. Zimmermann, *World Resources and Industries*, cited, pp. 697-98.

9. *Ibid.*, pp. 292-97.

tance to abrasion, shocks and corrosion.<sup>10</sup> Among the fibers, jute, hemp and flax also cannot be omitted from the list of raw materials: The same may be said of nitrates, potash and phosphates, although natural nitrates have yielded in importance to the synthetic product and part of the output of phosphates is derived as a by-product of the iron and steel industry. Finally, one might add graphite, used for crucibles and lubricants; asbestos, employed for its resistance to friction and fire; and mercury, which finds a varied use in drugs, chemicals and explosives, and scientific instruments.

## INEQUALITIES OF DISTRIBUTION

What is the geographic distribution of these raw materials? If production statistics are examined, it becomes immediately evident that many countries lack almost all the primary products essential to modern industry. The Baltic, Balkan and Scandinavian countries, with a few minor exceptions, are relatively poor in raw materials. As for the big powers, the accompanying chart discloses that the British Empire, including the Dominions, produces substantial quantities of a wide range of products. The United States is the leading producer of numerous raw materials, while the Soviet Union also has a considerable share. Compared to these three countries, Germany seems poor. Yet it must be remembered that Germany produces a large part of the world's coal, and that this coal is above all excellent for coking. With its geographical propinquity to the iron resources of France and Sweden, Germany has an assured basis for a powerful heavy industry. France, moreover, is not much more richly endowed than Germany. At home it possesses considerable resources in iron and bauxite, the ore of aluminum, and its possessions produce substantial quantities of nickel, chrome, natural phosphates and some graphite. Its coal supply, however, is inadequate and of poor coking grade. Producing practically no coal, iron, copper or petroleum, Italy must definitely be counted among the "proletarian nations." It produces significant quantities only of bauxite, sulphur, mercury, hemp, raw silk and olive oil—all of secondary importance. Japan's supply of basic raw materials is also inadequate.

### THE IMPORTANCE OF COLONIES

Of what value are colonial possessions as sources of raw materials? In answering this question the British Dominions and India should be excluded:

10. *Ibid.*, pp. 595-96.

the former because they are practically independent, the latter because it occupies an intermediate status on the way toward eventual independence. It then appears that all the dependent territories together supply a disproportionately small share of the world's demand for raw materials. Coal and iron are almost wholly lacking; of the other important minerals, colonies supply almost 10 per cent of the world's nickel, 10 to 20 per cent of copper, bauxite and manganese, from 20 to 30 per cent of the graphite and tungsten, between 20 and 50 per cent of the chrome ore, and about half of the tin. They have a practical monopoly in rubber production and in the output of many vegetable oils including soya beans, copra, ground nuts, palm and palm kernel oil. In the production of fibers their share is small, with the exception of hemp of which the Philippines have the largest output. The whole continent of Africa, which is composed almost entirely of colonial possessions, produced only 3.6 per cent of the world's output of all raw materials in 1934. This percentage compares with 29.8 per cent for North America, and 30.2 for Europe exclusive of the Soviet Union.<sup>11</sup> However, since colonies—compared with industrial countries—consume very little or none of their own output in raw materials, their share of the total production underestimates their contribution to the world's salable supply.<sup>12</sup>

As for the colonies of individual countries, the British possessions—substantial producers of rubber, copper, tin, manganese, chrome, tungsten and a number of vegetable oils—are undoubtedly the most valuable. The colonies of The Netherlands are also comparatively rich, producing petroleum, tin, bauxite, rubber, copra and palm oil. The French colonial empire, including Algeria, contributes a considerable percentage of the output of nickel, chrome, natural phosphates and a few vegetable oils. Japan's possessions have not yet yielded significant quantities of raw materials; Manchoukuo, a Japanese protectorate, has a near-monopoly on the production of soya beans and contributes small percentages of coal and iron. With the exception of the Belgian Congo, which is an important producer of copper, all other colonial territories, including those of Italy, Spain and Portugal, are extremely poor in raw materials. It should also be noted that all the former possessions of Germany and Turkey, now under League mandate, contribute no raw materials of impor-

11. League of Nations, *World Production and Prices 1925-1934*, p. 19.

12. Cf. Royal Institute of International Affairs, "Raw Materials and Colonies," *Information Department Papers No. 18*, 1936, p. 25.

tance. Their share in the world output of olive and palm oil is about 5 per cent, and they produce from 7 to 10 per cent of the copra and between 3 and 6 per cent of the natural phosphates. Tanganyika's production of sisal constitutes about one-third of the world total.

Figures on present production of raw materials do not necessarily give an accurate picture of the relative natural wealth of countries because these statistics take no account of reserves. For example, although Europe currently supplies about half the world's demand for coal, it possesses only a little more than a quarter of the known reserves. Similarly, the United States' percentage of the production of oil far exceeds its share of reserves.<sup>13</sup> These are, however, extreme examples. On the whole there is not likely to be a change in the distribution of production sufficient to bring about any drastic shift in the relative industrial importance of countries.<sup>14</sup>

Although production statistics throw some light on the unequal distribution of raw materials, they do not accurately reveal to what extent every country is able to satisfy its own requirements. For this purpose figures on net imports and exports must be consulted. Even these, however, are not a perfect criterion, since the fact that a number of agricultural countries import few raw materials is obviously no demonstration of self-sufficiency, but rather proof of the lack of any large-scale industrialization. Moreover, countries rich in raw materials may have an offsetting deficiency in foodstuffs. These factors can be taken into account partially by considering not only imports of raw materials, but those of foodstuffs and certain essential semi-manufactured and finished industrial products such as iron and steel, chemicals, and machinery. On this basis the relative position of the chief countries has been approximately established.<sup>15</sup>

The United States undoubtedly has within its borders the largest and most adequate supply of raw materials. It produces a surplus of coal and is practically self-sufficient in iron ore. Its production of petroleum, copper, sulphur, cotton, zinc, phos-

phates and vegetable oils exceeds domestic demand. In lead and mica it is almost self-contained. It does need, however, considerable imports of nitrates, bauxite and wool, and is even more largely dependent on foreign supplies for tungsten, potash and mercury. Rubber, manganese, nickel, chromium, antimony and tin are entirely or almost entirely lacking. Normally, the United States produces more than enough food.

The Soviet Union is also well supplied with essentials. It needs to import no iron ore or coal and produces a surplus of petroleum, manganese and chromium. Supplies of sulphur, cotton, wool, phosphates and mercury are nearly adequate. Considerable quantities of copper, lead, bauxite, zinc and potash must be procured from abroad, and an almost total deficiency exists with respect to rubber, nickel, tungsten, antimony and tin. Part of its machinery requirements are still covered abroad. Like the United States, the Soviet Union possesses a more than adequate domestic food supply.

Britain by itself has a sufficient supply of coal only, and is seriously deficient in food. The British Empire as a whole, including the Dominions, is rich in natural resources. It produces enough iron and zinc to satisfy its own requirements and has a surplus of coal, rubber, manganese, lead, tin, nickel, chromium, wool, graphite and mica. Its output of petroleum, copper, sulphur nitrates, cotton and tungsten is not adequate, however, and it is almost entirely dependent on foreign supplies for mercury, antimony and potash. The production of the Dominions enables the Empire to be approximately self-sufficient in food.

France is much less adequately supplied with raw materials, even when its extensive colonies are taken into consideration. It has a surplus of iron ore and bauxite but lacks a sufficient supply of coal. Its colonies contribute chromium, nickel, graphite and vegetable oils in excess of its needs. These leave it still with large or total deficiencies in petroleum, copper, rubber, sulphur, zinc, lead, tin, mercury, tungsten and mica. With respect to food, France is about self-contained.

Germany lacks sufficient supplies of every mineral except coal and potash. It can cover a little more than half of its domestic requirements of zinc, but produces only small and far from adequate quantities of iron ore, petroleum, copper, lead, sulphur and wool. Bauxite, rubber, manganese, nickel, chromium, tungsten, antimony, tin, mercury and mica are completely lacking. Domestic food supplies are also insufficient, imports of oils and fats being particularly necessary.

Italy has almost no coal and very little iron, the

13. Zimmermann, *World Resources and Industries*, cited, p. 440.

14. For a survey of the outstanding changes in the geography of production now under way and likely to take place in the future, cf. C. K. Leith, *World Minerals and World Politics* (New York, McGraw Hill, 1931), pp. 35-43; also H. Foster Bain, *Ores and Industry in the Far East* (New York, Council on Foreign Relations, 1933); and H. Foster Bain and Thomas T. Read, *Ores and Industry in South America* (New York, Harper, 1934).

15. Cf. Brooks Emeny, *The Strategy of Raw Materials* (New York, Macmillan, 1934), and Evans Clark, ed., *Boycotts and Peace* (New York, Harpers, 1932).

# GEOGRAPHIC DISTRIBUTION OF PRODUCTION OF RAW MATERIALS

(average of 1930 and 1933)

	Coal	Iron Ore	Petroleum	Copper	Lead	Zinc	Tin	Bauxite	Rubber	Cotton	Wool	Sulphur	Wood Pulp	Potash	Natural Phosphate	Nickel	Manganese	Chromite
British Empire (Total)	22.96	10.56	1.64	19.60	37.89	26.56	43.39	6.50	64.59	17.87	48.63	.....	19.88	.....	6.33	87.10	34.89	34.85
Great Britain	20.56	7.47	.....	.....	2.17	.....	1.61	.....	.....	.....	3.10	.....	.82	.....	.....	.....	.....	.....
Dominions	1.14*	1.22	.08	12.18	27.20	21.03	7.60	.....	.....	.07	42.43	.....	19.06	.....	.....	85.08	2.63	3.22
India	1.83	1.21	.62	7.64	7.64	4.34	2.82	.....	1.00	16.43	2.70	.....	.....	.....	.....	2.02	18.03	22.73
Dependencies	.....	.66	.93	7.41	.....	1.43	36.36	6.50	63.59	1.30	.39	.....	.....	.....	2.94	.....	14.22	.....
Mandates	.....	.....	.....	1.74*	.....	.....	.....	.....	.....	.08	.....	.....	.....	.....	3.39	.....	.....	.....
United States (Total)	37.14	26.55	62.52	28.34	25.70	32.26	.....	17.58	.....	51.47	11.92	78.43	24.75	5.20	30.54	.....	1.49	.....
Dependencies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Soviet Union	5.68	10.98	.....	.....	.92	.....	.....	.....	.....	.....	5.99	.....	2.56	.....	8.16	.....	51.72	19.85
French Empire (Total)	4.50	31.63	.....	.....	1.73	1.07	.90	41.70	1.52	.19	3.73	.....	.....	20.68	47.43	9.06	.49	11.77
France	4.50	30.20	.....	.....	.69	.....	.....	.....	1.52	.17	2.24	.....	.....	.....	1.09	.....	.....	.....
Dependencies	.....	1.43	.....	.....	1.04	1.07	.90	.....	.....	.02	.28	.....	.....	.....	46.34	.....	.49	11.77
Mandates	.....	.....	.....	.....	.....	.....	.....	.....	.....	.01	.....	.36	.58	.....	.92	.....	.52	.....
Dutch Empire (Total)	.....	.....	2.41	.....	.....	.....	17.16	12.87	31.11	.....	.....	.....	.....	.....	.....	.....	.....	.....
The Netherlands	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dependencies	.....	.....	2.41	.....	.....	.....	17.16	12.87	.....	.01	.....	.36	.....	.....	.92	.....	.52	.....
Belgium (Total)	2.34	.....	.....	7.46	.....	.....	1.33	.....	.....	.25	.....	.....	.....	.....	.....	.....	.....	.....
Dependencies	.....	.....	.....	7.46	.....	.....	1.33	.....	.....	.25	.....	.....	.....	.....	.....	.....	.....	.....
Mandates	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Japan (Total)	4.06	1.30	.....	5.74	.....	.....	1.38	.....	.....	.54	.....	.....	3.95	.....	.86	.....	1.54	3.35
Dependencies	1.20	1.30	.....	.....	.....	.....	1.38	.....	.....	.54	.....	.....	.....	.....	.....	.....	.....	.....
Mandates	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Italy (Total)	.....	.....	.....	.....	1.67	3.78	.....	9.38	.....	.....	.74	16.17	.....	.....	.....	.....	.....	.....
Dependencies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Spain (Total)	.....	.....	.....	.....	6.45	3.07	.....	.....	.....	.....	2.13	.54	.....	3.58	.....	.....	.....	.....
Dependencies	.....	.....	.....	3.91	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portugal (Total)	.....	.....	.....	.....	.....	.....	.48	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....
Dependencies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....
Germany	.....	.....	0.09*	.....	4.37	8.84	.....	.....	.....	.....	.86	.....	11.29	66.34	.....	.....	.....	.....
Poland	2.84	2.99	.....	2.24	.....	4.68	.....	.....	.....	.....	.....	.....	.62	3.01	.....	.....	.....	.....
Czechoslovakia	.....	0.96*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.92	.....	.....	.....	.....	.....
Total—all dependencies	1.65	3.81	3.75	7.46	1.91	2.50	55.75	19.37	96.69	2.46	2.92	.36	.....	.....	54.46	9.06	15.19	34.50
Total—Mandates	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total—India	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total—Mandates	3.48	5.02	4.37	14.88	9.55	6.85	58.57	.....	97.70	18.90	5.63	.36	.....	.....	54.46	11.09	33.22	41.12
Total—Mandates	.....	.....	.....	.....	1.74*	.....	.....	.....	.....	.12	.28	.....	.....	.....	.425	.....	.....	.....

\*1930 only †1933 only

**GEOGRAPHIC DISTRIBUTION OF PRODUCTION OF RAW MATERIALS**

(average of 1930 and 1933)

	Tungsten	Molybdenum	Antimony	Mercury	Asbestos	Flax	Raw Silk	Hemp	Jute	Cotton Seed	Linseed	Hemp Seed	Sesamum	Soya Beans	Copra	Ground Nuts	Palm & Palm Kernel Oil	Olive Oil
British Empire (Total)	83.24	1.14	.31	.11	87.81	.....	.13	.....	99.63	20.24	12.80	.....	73.92	.....	31.92	60.44	51.78	4.41
Great Britain	1.57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dominions	4.76	1.14	.30	.04*	81.25*	.....	.....	.....	.....	.07	1.91	.....	.....	.....	.....	.15	.....	.....
India	51.38	.....	.01*	.....	.....	.....	.13	.....	99.63	18.63	10.87	.....	68.82	.....	.....	54.14	.....	.....
Dependencies	25.52	.....	.....	.....	1.90*	.....	.....	.....	.....	1.45	.01	.....	4.57	.....	24.48	5.70	51.78	2.39
Mandates	.....	.....	.....	.....	.....	.....	.....	.....	.....	.09	.....	.....	.52	.....	7.44	.45	.....	2.02
United States (Total)	16.13†	84.45†	2.70†	16.38	1.46	.....	.....	28.63	.....	46.72	9.35	.....	.....	4.76	32.12	6.46	.....	.....
Dependencies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.01	.....	.....	.....	.....	32.12	.09	.....	.....
Soviet Union	.....	.....	.....	2.22*	14.78*	75.48	2.36	36.51	.....	6.85	20.88	42.72	2.71	1.46	2.13	.....	.....	.....
French Empire (Total)	.....	3.70†	3.43	.....	2.28	.....	.32	.87	.02	.22	.50	.08	.62	.....	.....	.....	.....	.....
France	.....	.....	.....	.....	2.28	.....	.....	.67	.....	.17	.30	.....	.....	.....	.....	.....	.....	.85
Dependencies	.....	3.70†	.51†	.....	.....	.....	.01	.....	.02	.05	.20	.....	.44	.....	2.04	14.07	9.50	10.68
Mandates	.....	.....	.....	.....	.....	.....	.31	.20	.....	.02	.....	.08	.18	.....	.08	.37	5.40	2.15
Dutch Empire (Total)	.....	6.42	.....	.....	1.11	.....	.....	.....	.....	.02	.....	.....	.52	2.27	29.57	4.01	16.14	.....
The Netherlands	.....	.....	.....	.....	1.11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dependencies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.02	.....	.....	.52	.....	29.57	4.01	16.14	.....
Belgium (Total)	.....	.....	.....	.....	2.40	.....	.....	.....	.....	.26*	.21	.....	.81	.....	.....	1.44	13.36	.....
Dependencies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.26*	.....	.....	.81	.....	.....	1.41	13.36	.....
Mandates	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.03	.....	.....
Japan (Total)	.....	.....	.78†	.27	.42	.51	80.39	5.12	.33	.62	.....	9.01†	1.74	91.27	.70	.....	.....	.....
Dependencies	.....	.....	.10†	.02*	.10†	.....	2.58	3.65	.27	.62	.....	9.01†	1.74	85.77	.....	.....	.....	.....
Mandates	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.70	.....	.....	.....
Italy (Total)	.....	.....	1.68	35.58	.87	.....	.....	12.94	.....	.02	.06	.....	.....	.....	.....	.....	.....	.....
Dependencies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	24.75
Spain (Total)	.88†	.....	.20†	38.11	.....	.....	.....	.92	.....	.02	.....	.....	.....	.....	.....	.40	.45	.....
Dependencies	.....	.....	.20†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.39	.....	.....	.....	.....	.....
Portugal (Total)	8.76	.....	.....	.....	.....	.....	.....	.....	.....	.06	.....	.....	.39	.....	1.67	1.02	2.27	6.79
Dependencies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.06	.....	.....	.....	.....	.....	1.02	.....	.....
Germany	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Poland	.....	.....	.....	.....	5.46	.....	.....	2.59	.....	.....	1.42	4.47	.....	.....	.....	.....	.....	.....
Czechoslovakia	1.00*	.....	4.13	.87	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total—all dependencies	25.52	8.27	.81†	1.00	.02*	.....	2.91	32.48	.29	2.56	.28	4.58	9.31	88.02	100.00	82.60	98.99	17.80
Total—including India	76.90	.....	.41	.....	.....	.....	3.04	.....	99.93	21.19	11.15	4.58	78.13	88.02	100.00	82.76	98.99	17.80
Total—Mandates	.....	.....	.....	.....	.....	.....	.31	.20	.....	.14	.....	.....	.71	.....	8.23	.85	5.40	4.27

\* 1930 only † 1933 only

most basic minerals, and is thus compelled to import a considerable part of its iron and steel, and machinery. The only minerals of which it has an export surplus are sulphur, mercury and zinc. It also possesses a more than adequate supply of silk, hemp and vegetable oils. It does not produce enough lead, zinc or antimony, and for the remaining raw materials is almost wholly dependent on foreign countries. Even its food supply is insufficient, since it must import much meat and fish.

Japan and its possessions occupy only a slightly more favorable position than Italy. Its coal production suffices, but even with the addition of Manchoukuo the supply of iron ore is inadequate. Like Italy, it must import iron, steel and machinery. Japan possesses enough sulphur, mica, chromium and tungsten and is nearly self-sufficient in copper. For petroleum, however, and all the other raw materials, it must rely almost entirely on imports. Nor is it completely independent of foreign food.

Other countries besides Japan and Germany are poorly supplied with raw materials. Czechoslovakia produces a surplus of coal, but lacks sufficient iron ore. With the exception of antimony and graphite, which it can export, and mercury, of which it has an adequate supply, it is completely deficient in the other raw materials. Poland also has an export surplus of coal, but possesses almost no iron ore. It produces more than enough lead and zinc, and sufficient petroleum. Otherwise, it is completely dependent on foreign countries.

Although this summary description of the relative position of a number of countries is by no means exhaustive, it is sufficient to demonstrate that, even though the most richly endowed nations must rely on imports for some raw materials, the distribution of natural wealth is exceedingly unequal. This inequality becomes even more marked when one takes into consideration the fact that the leading countries also exercise commercial or financial control over raw material sources outside their boundaries. It has been estimated, for example, that three-fourths of the world's mineral production is controlled by commercial organizations in the United States and Britain.<sup>16</sup>

It has been rightly said that, with the exception of the Soviet Union, raw material sources are not really "owned" by nations but by individuals, who exploit them for private profit and usually sell on the same terms to foreigners and nationals alike.<sup>17</sup>

16. Leith, *World Minerals and Politics*, cited, p. 15. For a complete study of this subject, cf. Wm. P. Rawles, *The Nationality of Commercial Control of World Minerals* (New York, The Mineral Inquiry, Contribution No. 41, American Institute of Mining and Metallurgical Engineers, 1933).

It must be conceded, however, that a country's national wealth depends on the extent of its natural resources and the ability of its people to make effective use of them. Superior human material can compensate only partially for a poverty of raw materials. Whether the profits of exploitation go to the state or private capital, they do serve to enhance the national income. The possession of a varied and adequate supply of raw materials removes, also, the fear of foreign monopoly, restriction or discrimination, and enables the country so fortunately endowed to practice a discriminatory policy with respect to other nations. The same country is less severely affected by a breakdown of the international machinery of exchange since it needs to buy only few essentials abroad. Foreign exchange difficulties are possible, however, even within an empire. The constituent members of the British Commonwealth of Nations, for example, all have their own currency systems and the monetary units of the Dominions sometimes move independently of the British pound. The possession of raw materials is obviously of great strategical importance in time of war. If, however, these essentials are distributed over a widely scattered empire, the advantage is much smaller. In such a case, the control of communications becomes more vital.

## RESTRICTIONS IMPEDING THE SUPPLY OF RAW MATERIALS

The prevailing unequal distribution of raw materials would entail no economic difficulties were it not for obstacles preventing completely free access to these products. These obstacles are of two kinds. The first type includes all those measures which tend to restrict, divert or otherwise control the available supply. The second consists of factors limiting the purchasing power or effective demand for raw materials.

A number of countries maintain export restrictions, either to foster national shipping or encourage the domestic processing of native raw materials. In this way the cost of the primary products affected is often increased for other states. Thus embargoes on the exportation of pulp wood progressively applied by Canada and Newfoundland have made the greater part of Canadian supplies of this raw material inaccessible to United States paper mills and hastened the transfer of manufac-

17. Norman Angell, *Raw Materials, Population Pressure and War* (New York, World Affairs Books No. 14, World Peace Foundation, 1936), pp. 19-22.

ture across the boundary.<sup>18-19</sup> To aid the domestic refining industry, the Japanese government limits crude camphor exports.<sup>20</sup> In the Portuguese colonies export taxes on a considerable number of products are lower if transported in Portuguese ships or if destined for Portugal.<sup>21</sup> Discriminatory duties are applied to the export of some French colonial products and exist also in Spanish Guinea and Italian Libya and Somaliland. Probably the most important duties of this kind still being enforced are those applicable to tin ore exports from the Federated Malay States and Nigeria, both British possessions. The first is prohibitive unless the ore is smelted in the Straits Settlements, the United Kingdom or Australia; the second favors the entire British Empire. In this way the British retain a monopoly in the smelting of Empire tin.<sup>22</sup>

At times, exportation or production is restricted as part of a plan to exploit to the fullest possible extent a monopoly or quasi-monopoly of an important product. Thus producers in the Netherlands East Indies, aided by the government, have been able to maintain since 1913 a practical monopoly on the sale of cinchona or quinine bark, which was reinforced in February 1934 by the institution of control over exports and production. The price policy of this combine has often been criticized.<sup>23</sup> From 1922 to 1928 the Stevenson Act limited the exportation of rubber from British colonies, thereby contributing to a sensational rise in prices which in November 1925 soared to over a dollar a pound.<sup>24</sup> The Japanese government has for a long time monopolized the collection and sale of camphor, thereby obtaining high prices. Increased competition of synthetic camphor, however, particularly since 1926, has seriously impaired its monopoly.<sup>25</sup> Similarly, export taxes on Chilean saltpeter constituted a considerable burden on foreign consumers until the competition of synthetic nitrates became too acute.<sup>26</sup> United States control of cotton production and marketing under the Agricultural Adjustment Act was instrumental in almost doubling world cotton prices from 1933 to

1935, although only at the expense of encouraging cotton-growing elsewhere in the world.<sup>27</sup> On the whole, national restriction schemes can succeed in controlling world prices solely where individual countries have and retain an effective monopoly of production. That such is seldom the case is illustrated by the ultimate failure and abandonment of the Stevenson Act, collapse of the Chilean nitrate monopoly and limited efficacy of American cotton control. Moreover, whenever control is effective, it seldom discriminates between national and foreign consumers; in fact, national cartels often charge higher prices at home than abroad.

Of greater potential danger to the interests of consumers are international agreements regarding production or marketing. The number of such agreements or cartels is considerable, and has grown particularly since the advent of the depression. Most are private agreements, although in recent years governments have increasingly fostered them. A few examples may be cited.

The output of tin is restricted on a quota basis by an International Tin Committee set up by an agreement among the governments of the most important producing countries. This accord became effective in March 1931 and was renewed for three years from January 1934. Malaya, The Netherlands East Indies, Bolivia and Nigeria are included in the scheme; and, since July 1934, the minor producers such as Great Britain, Portugal, the Belgian Congo and Indo-China. Aided by a gradual increase in consumption, the agreement was instrumental in almost doubling the price of tin—from an average quotation in London of £118.6 in 1931 to £225.7 in 1934. Some decline in price has since taken place.<sup>28</sup>

In October 1926 American copper producers organized Copper Exporters, Inc., which soon developed into an international cartel controlling 90 per cent of the world output. During 1927 and 1928 the cartel maintained fairly reasonable prices but, when stocks ran low early in 1929 and heavy buying set in, it took advantage of the situation by increasing prices sharply. By April 1929 copper was being sold at 24.38 cents a pound, as compared with 14.4 cents on the formation of the cartel and a production cost of about 10 cents.<sup>29</sup> Subsequently

18-19. B. B. Wallace and L. R. Edminster, *International Control of Raw Materials* (Washington, The Brookings Institution, 1930), pp. 222-31.

20. *Ibid.*, p. 70.

21. I. Lippincott, *The Development of Modern World Trade* (New York, Appleton-Century, 1936), p. 530.

22. Wallace and Edminster, *International Control of Raw Materials*, cited, pp. 244-45.

23. Cf. W. L. Holland, *Commodity Control in the Pacific Area* (London, Allen & Unwin, 1935), pp. 294-97; also "De Kina-Restricctie," *In-en-Uitvoer*, February 27, 1934.

24. Wallace and Edminster, *International Control of Raw Materials*, cited, pp. 174-95.

25. *Ibid.*, pp. 57-74.

26. *Ibid.*, pp. 64-75.

27. John C. deWilde, "The AAA and Exports of the South," *Foreign Policy Reports*, April 24, 1935.

28. "The Future of Tin Restriction," *The Economist*, February 1936; cf. also "The Tin Control," *ibid.*, March 23, 1935. It has been contended, however, that the rise in prices when measured in terms of gold has not been unreasonable. Cf. "Le Contrôle de la production de l'Étain," *Rotterdamsche Bankvereeniging, Revue Mensuelle*, August-September 1935.

29. Alfred Plummer, *International Combines in Modern Industry* (London, Pitman, 1934), pp. 149-52.

prices collapsed and the cartel disintegrated, but in March 1935 the chief producers outside the United States again reached an agreement to restrict production.<sup>30</sup>

The production of rubber became subject to international regulation on May 7, 1934, when the governments of Great Britain, India, The Netherlands, France and Siam signed an agreement to this effect.<sup>31</sup> Since the inauguration of this restriction scheme, prices have undergone no marked advance. It should be added, however, that during 1933 and the early part of 1934 rubber quotations more than doubled, no doubt partially in anticipation of the agreement. In 1924 a Franco-German combine for the division of potash markets was founded. Strengthened by supplementary agreements in the following two years, this cartel was able to bring about a substantial increase in prices considerably in excess of that justified by costs of production.<sup>32</sup> Throughout the depression it has been able to maintain comparatively stable prices.<sup>33</sup> In 1934 and 1935 the cartel was extended to include new producers, notably Poland and Spain. To prevent a drastic decline in prices, Spanish and Italian producers of quicksilver formed the European Mercury Consortium on October 1, 1928. By establishing a joint selling agency designed to limit supplies, this cartel was able to maintain high prices until the middle of 1931. Thereafter, however, a complete price collapse could not be avoided.<sup>34</sup>

The existence of some form of control over output or prices does not necessarily mean that consumers are being exploited. Cartels may bring about a certain stability of production and prices desirable both in the interest of producer and consumer. A number have been formed during the depression years in order to check a disastrous decline in prices and a continuous accumulation of stocks, so the mere fact of a subsequent rise in prices cannot of itself be regarded as evidence of monopolistic abuse. Even where the prices charged are excessive, it must be remembered that with rare exceptions cartels do not discriminate in favor

of nationals in the countries of production. All consumers pay the same price.

Moreover, both the possibility of creating international monopolies and their price policy subsequent to formation are subject to checks. The anti-trust legislation of a country such as the United States may prevent the conclusion of a cartel or weaken its efficacy. The task of securing agreement among producers scattered through numerous countries is always formidable. The allocation of quotas and determination of prices are likely to present insuperable difficulties. Once formed, the cartel may be weak owing to the failure of certain producers to participate. Low-cost producers within the agreement are interested in large output at relatively low prices and may therefore exercise a moderating influence in determining price policies. The threat of outside competition and the possibility of using substitutes or alternative processes of production constitute further checks. Finally, the cartel must always reckon with a possible decline in consumption and increase in stocks.<sup>35</sup>

On the whole it cannot be said that the supply of raw materials is subject to serious restrictions except in certain cases. Countries producing primary products are generally most anxious to sell them, even at extremely low prices. Large unsalable stocks of rubber, cotton, tin, lead and other materials have piled up since 1929. The League of Nations' index of world stocks of primary commodities rose from 100 in the middle of 1929 to 169 in 1932, and stood at 127 in 1935.<sup>36</sup> After 1929, prices of raw materials fell much more rapidly than those of manufactures. Raw and partially manufactured materials entering into foreign trade had declined 60 per cent in price by 1933 as compared to a drop of only 45 per cent for finished goods.<sup>37</sup> Clearly the available supply ran far ahead of effective demand.

## FACTORS LIMITING THE PURCHASING POWER FOR RAW MATERIALS

The real crux of the raw materials problem must therefore be sought in the insufficient purchasing power of consuming countries. To buy abroad, these countries need means of payment or foreign exchange—which can be acquired only by exporting goods and services or by importing capital.

35. Cf. League of Nations, *General Report on the Economic Aspects of International Industrial Agreements* (Geneva, 1931), p. 24.

36. League of Nations, *Monthly Bulletin of Statistics*, February 1936, p. 56.

37. League of Nations, *World Production and Prices, 1925-1934*, p. 111.

30. *The Economist*, April 6, 1935.

31. J. W. F. Rowe, *Markets and Men* (Cambridge, University Press, 1936), pp. 143-51.

32. Wallace and Edminster, *International Control of Raw Materials*, cited, pp. 105-13.

33. Average annual prices in gold francs per kilogram of pure potash have been as follows:

	1924	1933	1934	1935
Germany	0.14	0.17	0.20	0.20
France	0.12	0.18	0.18	0.17

League of Nations, *Statistical Year-Book, 1935-36*, p. 165.

34. "The Outlook for Quicksilver," *The Economist*, August 31, 1935.

During the depression, however, the machinery of international trade or distribution has largely broken down. To the ancient device of tariffs there have been added newer and more effective quantitative restrictions on trade, such as quotas, foreign exchange controls and clearing agreements. Before 1929, a substantial international flow of capital sustained and increased the volume of trade, but since the advent of the economic crisis foreign capital investment has virtually ceased. The continued spasmodic flow of short-term capital has been a disturbing rather than a stabilizing influence on international exchange. Debtor countries like Germany and many others suffered most from the situation. Deprived of further foreign capital, they faced the necessity of paying interest and principal on foreign debts previously contracted; at the same time their ability to export was being progressively restricted. Under these circumstances foreign exchange control and debt moratoria were the inevitable results. The depreciation and devaluation of many currencies further enhanced the difficulties of countries such as Germany, Italy and others who, for one reason or another, were unable or unwilling to follow the same policy and therefore adopted the alternative course of reducing imports as far as possible.

The sharp increase in production which has taken place in many countries during the last few years has introduced additional complications because it has not been attended by a corresponding improvement in international trade. In 1935 the volume and gold value of international trade were still 21 and 65 per cent, respectively, below the levels of 1929,<sup>38</sup> while world production as a whole had already reached pre-depression totals.<sup>39</sup> The recovery of industrial production and consequent increase in the demand for primary products has undoubtedly benefited countries exporting raw materials, but at the same time has accentuated the difficulties of those poor in natural resources. By the spring of 1936 German industrial production had already risen about 80 per cent since 1932, while German exports, valued in Reichsmarks, ran only slightly larger than the previous year and were still 20 per cent below the 1932 average.<sup>40</sup> Germany has therefore experienced growing difficulty in supplying itself with foreign raw materials. It has been able to maintain the rise in production only by rigorously excluding almost

all non-essential imports, by drawing on existing stocks, and exploiting to the limit domestic sources of raw materials. Even before the imposition of sanctions in November 1935, Italy's foreign exchange position had also been steadily growing worse. During the first nine months of 1935 the value of exports averaged 28 per cent below 1932, while industrial production was about 37 per cent higher. From the end of 1932 to October 20, 1935 the Bank of Italy was compelled to part with 2,828 million lire in gold and foreign exchange. Other countries have experienced similar difficulties. Despite the devaluation of the Czech crown by 20 per cent early in 1934, Czechoslovakia has had to tighten its foreign exchange control. An increasingly unfavorable balance of trade also led Poland to introduce exchange restrictions in May 1936.<sup>41</sup>

The position of raw material importing countries has been particularly weakened by the breakdown of multilateral trade during recent years. Almost all the industrial countries of Continental Europe have depended on multilateral exchange for the purchase of necessary supplies of raw materials. They dispose of the bulk of their exports in Europe and use the foreign exchange thus acquired to buy primary products from other continents. Germany, for example, normally sells three-fourths of its exports of finished goods in Europe, but imports most of the foreign materials needed in their manufacture from overseas countries.<sup>42</sup> Since 1929, ever greater stress has been laid on the balancing of trade between individual countries, necessarily at the expense of triangular or multilateral clearing of commercial transactions. Chaotic currency conditions have hastened this trend toward bilateralism. The unwillingness of many European nations to devalue or depreciate their currencies, together with their inability to carry through the alternative policy of deflation, brought about a widespread resort to quotas, foreign exchange restrictions and clearing agreements, all of which were employed to reduce "unfavorable" trade balances with individual countries. In part of its own volition, in part through compulsion, Germany has been buying an increasing proportion of its raw materials and foodstuffs in European countries where prices are generally much higher than overseas. Italy, also, has been

38. League of Nations, *Monthly Bulletin of Statistics*, May 1936.

39. Institut für Konjunkturforschung, *Vierteljahrshefte zur Konjunkturforschung*, Heft 1, Teil B, 1936, p. 26.

40. League of Nations, *Monthly Bulletin of Statistics*, July 1936.

41. In the first four months of 1936 production in Czechoslovakia averaged about 19 per cent higher than in 1932, while exports were still 5 per cent below that year. In the same period, Polish production exceeded 1932 levels by almost 28 per cent, although exports were 9 per cent lower. These figures were compiled from League of Nations, *Monthly Bulletin of Statistics*, July 1936.

42. League of Nations, *Review of World Trade*, 1933, p. 29.

deriving a growing share of its imports from Europe.<sup>43</sup> The insistence on bilateral exchange has inevitably made raw materials dearer for those countries, and greatly aggravated their difficulties in procuring essential supplies from overseas.

Germany and Italy have largely contributed to their own plight. By embarking on programs of internal economic expansion while adhering to the gold value of their currencies, they greatly added to their foreign exchange difficulties. Germany's rearmament and Italy's preparation for the Ethiopian campaign required large imports of raw materials which otherwise would have been unnecessary. Both states have been in the forefront of the nations aiming at self-sufficiency, particularly in foodstuffs; and Germany has deliberately shifted its imports from overseas countries to Europe as part of a plan to create a large European economic bloc or *Grosswirtschaftsraum*. Furthermore, the repressive policy pursued by the German government with respect to domestic political and racial minorities provoked a foreign boycott of German goods, while Italy incurred the imposition of economic sanctions by its act of aggression against Ethiopia.

Almost every country, however, must shoulder some blame for the restriction and distortion of international trade. The United States, in particular, cannot escape a considerable share of the responsibility. Although a creditor country and an important supplier of raw materials, it has adhered to an extremely high tariff policy and thus refused to import sufficient foreign goods in payment of debts and exports. Only recently has its policy undergone some modification through the conclusion of trade treaties. Britain, too, aggravated the situation by adopting a protective tariff policy in 1932, although its course may have been justifiable from the British point of view.

#### COLONIAL AND IMPERIAL PREFERENCES

Colonial and imperial discriminatory tariffs can have contributed but slightly to the export difficulties of countries without colonies of their own. Colonial populations with their low standard of living and few needs afford only very limited markets for the production of modern industrialized countries. All colonies together absorbed only 9.29 per cent of the world's exports in 1929 and 11.54 per cent in 1934. When the import trade of

the British Dominions and India is added, the proportion increases respectively to 19.38 and 20.56 per cent.<sup>44</sup>

In many African colonies and in all the A and B mandates the open door is guaranteed by international treaties. In other words, the goods of all countries are admitted on a footing of equality. The General Act of Berlin of 1885, replaced by the Convention of Saint-Germain of September 10, 1919, provided for the maintenance of the open door in the entire Congo Basin,<sup>45</sup> while the League Covenant and the separate mandate agreements lay down the same requirement for A and B mandates.<sup>46</sup> In the B mandates, however, equality of treatment is subject to the rather ambiguous exception "that the Mandatory shall be free to organize essential public works and services on such terms and conditions as he thinks just." In both the Spanish and French sections of Morocco the open door was established by the Algeciras Convention of 1906, signed by Britain, Germany, France, Spain and Italy. A non-discriminatory tariff system also prevails in the West African colonies of Nigeria, the Gold Coast, Dahomey and the Ivory Coast, although its continuation depends entirely on an Anglo-French Convention of 1898 the benefits of which have been extended to other countries by most-favored-nation agreements.<sup>47</sup>

Even where the open door is observed, the mother country or mandatory is usually able to capture a greater share of the trade than would be possible if it did not control the territory.<sup>48</sup> The local government naturally obtains all its supplies from the home country, although in a Mandated Territory it must submit material requirements for large public works for international tender.<sup>49</sup> Government officials, who in many colonies are the chief consumers of imported goods, usually prefer the products of their own country. The official language and legal system, and the local business practices and currency also tend to favor the busi-

44. Calculated from statistics in League of Nations, *Review of World Trade*, 1934, p. 27.

45. This area includes the Congo Free State, Ruanda-Urundi, Kenya, Tanganyika, Uganda, Zanzibar, Nyasaland, part of Abyssinia and Italian Somaliland, the northern part of Angola and Northern Rhodesia, and part of Sudan.

46. The A mandates include Palestine and Transjordan, and Syria and Lebanon. The B mandates are British Togo and Cameroons, French Togo and Cameroons, Tanganyika and Ruanda-Urundi.

47. The Royal Institute of International Affairs, "Raw Materials and Colonies," cited, pp. 40-41.

48. Cf. B. Gerig, *The Open Door and the Mandates System* (London, Allen & Unwin, 1929), p. 65.

49. Lord Lugard, "Africa and the Powers," *The Times* (London), September 19, 1935.

43. German imports from Europe in 1934 amounted to 59.2 per cent of its total imports, as compared with 53.3 per cent in 1929. The proportion of Italy's imports from Europe rose from 53.8 to 59.7 per cent in the period 1929-1934. Cf. League of Nations, *Review of World Trade*, 1934, p. 65.

ness interests of the mandatory or colonial power.<sup>50</sup>

Although the open door is thus of limited efficacy, it does create the greatest possible equality of conditions. The Mandates Commission on the whole has been quite successful in enforcing equality of customs treatment in the territories entrusted to its supervision.<sup>51</sup> It has not, however, ruled definitely against the so-called "purchasing clauses" in loan contracts which require proceeds of loans to be spent in the home country. Nor has it defined the "essential public works and services" which, under terms of the B mandates, the government is allowed to organize as it sees fit.<sup>52</sup>

The policies pursued by colonial or imperial powers reflect varying degrees of liberality. Since the trade of the British Empire amounted to 29.1 per cent of the world total in 1934,<sup>53</sup> the tariffs of the constituent parts of this Empire are of greatest concern to other countries. Since 1897, when Canada granted certain tariff favors to the United Kingdom, there has been an almost steady increase of preferential tariffs in the British Empire. South Africa and New Zealand began extending preferences in 1903, and Australia in 1908. Even before the war certain British colonies, notably the West Indian group, adopted similar policies. Although Dominion preferences were in some cases increased after the war, they remained rather limited in scope because the United Kingdom was prevented by its own low tariff policy from granting substantial concessions in return. In 1932, however, Britain adopted a general protective tariff and thus paved the way for the Ottawa Conference of the same year which established a system of imperial preference embracing the entire Empire except the open door colonies and mandates.<sup>54</sup> India, Newfoundland and a number of colonies which had not previously adopted discriminatory tariffs were included in these arrangements. The Ottawa agreements signed on August 20, 1932 are valid for a five-year period, after which they are subject to termination on six months' notice. Since the new and increased preferences were accorded in many cases only by raising the general level of duties, it may be doubted that the Ottawa Conference really contributed to a net expansion of world trade.<sup>55</sup> At any rate, outside countries like Ger-

many were placed at a greater disadvantage in all imperial markets.<sup>56</sup> In 1934 the British government also imposed quotas on imports of cotton and rayon piece-goods into British colonies not pledged to maintain the open door. Although designed to combat Japanese competition, these quotas were applied to all foreign countries except in the West African colonies, where the denunciation of the Anglo-Japanese trade agreement had deprived Japan of the benefit of the Anglo-French Convention of 1898 and thus enabled the government to discriminate in law as well as fact against Japanese imports. A number of duties discriminating against Japan have also been imposed in West Africa.<sup>57</sup>

In the French empire, whose share of world trade approximates 10 per cent, there exists a much more extensive preferential system. France and Algeria are united in a customs union. A more limited form of free trade prevails with Tunis, which retains its own tariff schedules. In Morocco and a few colonies France is obliged to maintain the open door. The law of April 13, 1928 divides the other colonies into two groups. To the first or assimilated group belong Guadeloupe, Martinique, Réunion, Indo-China and Madagascar. There the French tariff is applicable with some exceptions, and reciprocal free trade exists with the mother country. The colonies belonging to the second group, including Gabon and New Caledonia, retain autonomous tariffs which, however, accord preferential rates to French products.<sup>58</sup>

The Netherlands, which together with its colonies has a 5 per cent share of world trade, follows the most liberal colonial trade policy. The open

55. United Kingdom concessions were made possible by the adoption of a far-reaching tariff and import quota system; South Africa increased its preferences by raising duties on foreign goods; Australia followed the example of South Africa although the Tariff Board subsequently made some reductions; and Canada increased the general rates on slightly over half of the items on which it made concessions to the Empire. Cf. Leonard Barnes, *The Duty of Empire* (London, Gollancz, 1935), pp. 198-99.

56. Available statistics do not yet permit a definite conclusion about the effects of the Ottawa agreements. Although the proportion of inter-imperial to total Empire trade has increased slightly, this may be at least partially due to the fact that almost the entire Empire belongs to the sterling bloc.

#### INTER-IMPERIAL TRADE

	1925	1929	1931	1932	1933	1934
Value (millions of £.)	924	851	517	497	494	550
Percentage of total						

Empire trade 26.7 25.7 25.7 29.1 29.5 29.7

Source: Board of Trade, *Statistical Abstract for the British Empire for each of the ten years from 1925 to 1934* (London, H. M. Stationery Office, 1935), Trade and Commerce Section, p. 2.

57. Royal Institute of International Affairs, "Raw Materials and Colonies," cited, p. 42.

58. Edgard Allix, *Les Droits de Douane* (Paris, Rousseau, 1932), Vol. II, pp. 25-49.

50. Leonard Barnes, *The Future of Colonies* (London, The Hogarth Press, 1936), pp. 31-32.

51. Gerig, *The Open Door and the Mandates System*, cited, p. 195.

52. *Ibid.*, pp. 172-77; also Lionel Birch, *The Demand for Colonies* (London, League of Nations Union, 1936), pp. 18-19.

53. League of Nations, *Review of World Trade, 1934*, p. 22.

54. M. S. Stewart, "The Ottawa Conference," *Foreign Policy Reports*, December 21, 1932.

door is maintained as a matter of principle. In the East Indies, however, the imposition of a number of import quotas in recent years has discriminated in fact, if not in law, against Japan. International treaties require Belgium also to maintain the open door, both in the Congo Free State and its mandate, Ruanda-Urundi.

The remaining colonial powers have adopted less liberal policies. The United States requires its possessions to admit American products completely free of duty. Japan is compelled by treaty to maintain the open door in Kwantung and its protectorate, Manchoukuo, but there have been numerous complaints regarding the violation of this principle in Manchoukuo.<sup>59</sup> In the C mandates Japan is not obliged to apply equality of treatment. All other Japanese possessions, including Korea, Formosa and Sakhalin, are united in a customs union with the mother country and thus levy Japanese tariff rates on foreign products. Portugal has included the Azores and Madeira in its own customs boundary, and its products enjoy substantial preferences in all other possessions with the exception of part of Angola and Macao. Italy maintains preferential tariff rates in all its colonies except Somaliland. Spain also follows the preferential policy, although it must keep the open door in its zone of Morocco and accords equality of customs treatment in the Canary Islands.

### SOLUTIONS OF THE PROBLEM

Given the unequal distribution of raw materials among the countries of the world, what measures can be taken either to remove these inequalities or diminish their importance?

The transfer of territory is the first remedy that suggests itself to countries with little natural wealth of their own. Obviously there can be no question of reallotting or transferring the territory of self-governing imperial units such as Canada and Australia. Only the transfer of dependent colonies and, in particular, of mandates is considered in this connection. National prestige, the desire for equality of rights and the need for population outlets may or may not justify demands for colonial revision. In this report it is necessary only to examine how far a reapportionment of colonies could contribute to a solution of the raw materials problem. It has already been pointed out that colonies produce few raw materials of major importance; rubber and tin are the conspicuous exceptions. All the mandates, including the former German colonies, are exceedingly poor in raw

materials, so that returning them to their former suzerains would bring little relief. The possessions of Britain and The Netherlands in the Far East are undoubtedly the richest in primary products, but it is difficult to conceive of the two powers surrendering these colonies. Possession of even a small supply of colonial products might help a country whose foreign exchange position is very tight, although a more permanent and a sounder remedy would obviously lie in the expansion of international trade. On the whole, the transfer of colonies and mandates, even on a considerable scale, would constitute only a partial and inadequate solution of the problem.

Raw materials can be said to be unevenly distributed only in relation to population density. In theory, a balance of resources might be achieved by permitting people to move freely to the sources of raw materials, there to exploit and utilize them without restriction. In this way the movement of populations might ultimately compensate for differences in natural wealth and standards of living between countries. Artificial barriers to immigration, however, have been erected by many states. But without these barriers there probably would have been no large migratory movement in recent years, for widespread unemployment even in less thickly populated countries has made emigration unattractive. Relaxation of emigration restrictions and revival of migration must therefore await the elimination of unemployment. The latter, in turn, can be achieved only by repairing the machinery of exchange.

If redistribution of territory and population is excluded, how can raw materials be made freely available to all countries? It has already been pointed out that the present supply of raw materials considerably exceeds the demand as determined by purchasing power. This fact, however, should not prevent the adoption of measures which would remove, or stop the abusive use of, restrictions on the exploitation or exportation of such materials.

It would probably be too much to require, by international convention, that all countries accord foreigners and nationals the same rights in the exploitation of natural resources. Many weak states which have in the past been victims of economic imperialism could not be expected to make such a concession. As a minimum, however, all countries might agree not to discriminate between foreign nationals, while colonial or imperial powers might undertake to put foreigners on a footing of complete equality with their own citizens in the development of colonial resources.

59. Cf. Ben Dorfman, "Two Years of the Manchukuo Régime," *Foreign Policy Reports*, September 12, 1934, p. 178.

There would also be little use in demanding the abolition of export duties which some nations need for revenue or the conservation of natural wealth. An international agreement might provide, however, that such duties should in no case discriminate according to destination of the exports and that, wherever such export levies are exacted, equivalent excise charges should be imposed on internal consumption.<sup>60-61</sup> The League of Nations has worked in the past, but not very successfully, for the removal of export restrictions. On November 8, 1927 representatives of 18 states signed a Convention for the Abolition of Import and Export Prohibitions and Restrictions. This convention, even though weakened by many reservations, became effective in 1930 for only six countries—Denmark, Britain, The Netherlands, Norway, Portugal and the United States—none of which had extensive prohibitions or restrictions and all of which had made reservations covering the few embargoes they wanted to retain.<sup>62</sup> Greater success attended two more limited agreements adopted by a conference in 1928 and relating to the exportation of bones, and hides and skins.<sup>63</sup>

In theory there is little objection to international private and governmental agreements which seek to coordinate and organize the production and marketing of raw materials or other products. It is, however, essential to insure that production and prices are regulated in the interests of consumers as well as producers. For this purpose international supervision by some impartial body would seem to be necessary. The first task of such a body would be to enforce complete publicity. The International Economic Conference of 1927 expressed the conviction "that the publicity given in regard to the nature and operations of agreements constitutes one of the most effective means, on the one hand, of securing the support of public opinion to agreements which conduce to the general interest and, on the other hand, of preventing the growth of abuses."<sup>64</sup> In accordance with a recommendation formulated by this conference, the Economic and Financial Section of the League published three special studies on international cartels in 1930 and 1931.<sup>65</sup> Since that time, however, no

further information has been issued. In the future it may prove advisable to constitute a special commission to follow the operation of international schemes for the regulation of production and prices. Such a body might be constituted along lines similar to the International Labor Organization and consist of representatives of governments, producers and consumers.<sup>66</sup> Its activity might be confined at first to gathering information and publishing periodic reports on international combines. Since many production and price agreements are informal and often secret, its task would be difficult. Nevertheless, if assured the full cooperation of governments, it should prove at least partially successful in enforcing a salutary publicity. Should publicity fail, extension of the commission's power could be considered. A convention might then provide that all international cartels and similar arrangements should be unenforceable and subject to dissolution unless registered and approved by a simple or two-thirds majority of the supervisory commission. Just as the International Labor Conference adopts conventions on labor conditions, similarly constituted conferences might take the initiative in concluding agreements organizing the production of specific commodities on an international scale.<sup>67</sup> The interests of different nations and classes of people might thus be more effectively protected from the very beginning.

Although the supply of primary products is more than adequate at the present time, it may be advisable in the future to consider measures looking toward more systematic exploration and development of raw material sources. Some international organization, representative of the corporate interests in all countries, might be established to take such measures in hand.<sup>68</sup> As its first task it could aid the governments of colonies and relatively undeveloped but independent countries in making thorough surveys of their natural resources and drawing up plans for their most effective development. Migration of foreign labor and investment of foreign capital might be organized to carry out these plans. For this purpose colonization and investment corporations might be set up under international supervision. Haphazard

60-61. Wallace McClure, *World Prosperity* (New York, Macmillan, 1933), p. 420.

62. *Ibid.*, pp. 356-69.

63. The parties to the convention undertook to abolish all export prohibitions and restrictions on these commodities, to limit and reduce export taxes on bones and completely remove all export levies, except minor statistical charges, on hides and skins. *Ibid.*, pp. 372-75.

64. League of Nations, *Report and Proceedings of the World Economic Conference held at Geneva, May 4th to 23rd, 1927* (Geneva, 1927), p. 50.

65. *Review of the Legal Aspects of Industrial Agreements* (Geneva, 1930, E.529 [1]); *Review of the Economic Aspects of several International Industrial Agreements* (Geneva, 1930, E.614); and *General Report on the Economic Aspects of International Industrial Agreements* (Geneva, 1931, E.736).

66. Cf. H. R. G. Greaves, *Raw materials and International Control* (London, Methuen & Co., 1936), pp. 153-56.

67. *Ibid.*, pp. 149-50.

68. Cf. the suggestions of Giuseppe de Michelis, *World Reorganization on Corporate Lines* (London, Allen & Unwin, 1935).

migration and ruthless capitalist exploitation might thus be minimized, and national wealth increased.

As long as a sufficient supply of primary products is available, the raw materials problem can be reduced to one of international exchange. By stimulating the export of goods and services, all countries would be given an opportunity to acquire the means of payment necessary to buy abroad the raw materials they lack. In so far as colonial and imperial import preferences handicap the trade of countries having few or no colonies, removal of such discriminations would contribute to the solution of the problem. Suggestions have been made that the open door, at present obtaining in A and B mandates, be extended to all colonies,<sup>69</sup> or that all Territories not ready for self-government be converted into League mandates.<sup>70</sup> The adoption of either suggestion would go far toward establishing equality of trade conditions. The tariff preferences existing between the United Kingdom and various British Dominions are also incompatible with the open door principle.

Adoption of the suggestions outlined above would provide only a partial solution of the raw materials problem. The most efficacious remedial measures that could be devised are those which would bring about a revival of international trade on a sound economic basis. No country will experience difficulty in procuring essential raw materials when opportunities of international exchange are ample. The community of nations must therefore address itself to the task of removing or reducing the many impediments to the flow of world trade. In theory there are two ways of accomplishing this: one is to bring about conditions of free trade by the gradual abolition of existing restrictions; the other, to discard the old principles of economic liberalism and set about planning and organizing the exchange of goods. The first has hitherto been the recognized method of procedure. The League of Nations and almost all the economic conferences held since the war have sought to apply it. Under present circumstances this method would imply the restoration of the gold standard by an international agreement realigning and stabilizing world currencies and providing, perhaps, for loans to countries with depleted gold

reserves. It would necessitate simultaneously the removal of foreign exchange restrictions and quotas, and the reduction of tariffs. Trade treaties would be concluded under the unconditional most-favored-nation principle.

The implications of the second method are less clear, because the world has never yet engaged in any real planning of international commerce. That it is being considered today is due to a growing conviction among economists that the principles of *laissez-faire* are no more applicable to international economic relations than to national economic life.<sup>71</sup> Many of the present trade restrictions have been the inevitable accompaniment of growing governmental control over economic life. In order not to impair the success of efforts to put their domestic economy in order, countries have sought to protect themselves against the repercussions of uncontrollable forces abroad. This protection, in the absence of international machinery to regulate and control foreign trade, has unavoidably taken the form of import restrictions. If the future is to witness a further increase in governmental regulation and direction of economic activity, it will become ever more imperative to organize such measures of control on an international scale and to coordinate national economic policies. The organization of international trade will be difficult, particularly so long as there is not complete and universal national planning. In the end it may be found feasible to combine measures liberalizing world trade with others implying a certain amount of planning and organization in limited fields.

This is not the first time the problem of raw materials has aroused international concern. After the war the world suffered from a general shortage of raw materials, aggravated by the prevalence of chaotic currency conditions. At that time the question became the subject of a study by the League of Nations.<sup>72</sup> No international action was taken because revival of production and stabilization of exchanges made the problem much less serious. Although in time the present problem may also become less acute, no effort should be spared to hasten its solution and prevent its recurrence. All the remedies advanced in this report may not be practicable, but they may prove worthy of study and consideration. The problem is exceedingly difficult; and the absence of conditions of real political security further complicate its solution.

69. Lord Lugard proposes that "Great Britain should revert once more to her traditional policy of the 'open door' in all the overseas territories over which she has control, the departure from which since 1932 has afforded some pretext for the complaint of monopolies." Cf. "The Basis of the Claim for Colonies," *International Affairs*, January-February, 1936.

70. Sir Arthur Salter and Norman Bentwich, *Peace and the Colonial Problem* (London, National Peace Council, 1936), pp. 9-10 and 25-26; also Barnes, *The Future of Colonies*, cited, pp. 36-37.

71. Cf. G. D. H. Cole, *Principles of Economic Planning* (London, Macmillan, 1935), pp. 179-80.

72. Professor Gini, *Report on the Problem of Raw Materials and Foodstuffs* (Geneva, League of Nations, 1922).